

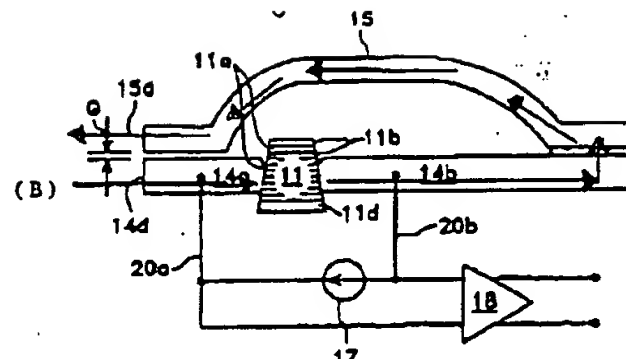
REMARKS

As a preliminary matter, Applicants have cancelled withdrawn claims 9 and 10.

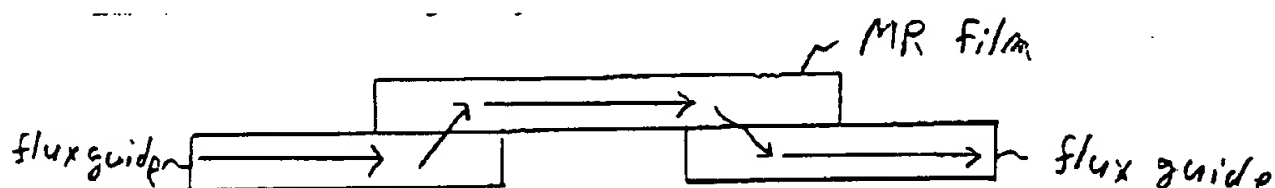
Claims 1, 2 and 4-8 stand rejected under 35 U.S.C. § 103(a) on the basis of Lederman et al. (JP 10-11721) in view of Lee et al. (U.S. Patent No. 6,223,420). Independent claims 1 and 8 have been amended to more clearly distinguish the present invention from this reference. Applicants traverse this rejection because the cited reference does not disclose or suggest a magnetic head having an MR film and a flux guide wherein the signal magnetic field in the flux guide is in the same general direction as the signal magnetic field through the magnetoresistance film, as in amended claims 1 and 8.

In Figs. 1 and 2 of Lederman et al., a magnetic head used in a magnetic reproducing device has an MR film 11, flux guides 14a, 14b, and also a flux guide 15. The Examiner cites the flux guide 15 as the flux guide claimed in the present invention since an upper part of a surface of the MR film 11 extends underneath a lower part of the flux guide 15. However, the flux guide 15 in Lederman and the claimed flux guide are different in function and structure.

In Lederman, the signal magnetic field is routed from the flux guide 14a to the magnetoresistance film 11 to the flux guide 14b, all in the outbound direction. Then, the flux guide 15 is used as a route for returning a flux (or inbound signal magnetic field), as shown in the following figure. Thus, the signal magnetic field in the magnetoresistance film 11 and the signal magnetic field in the flux guide 15 are in opposite directions.



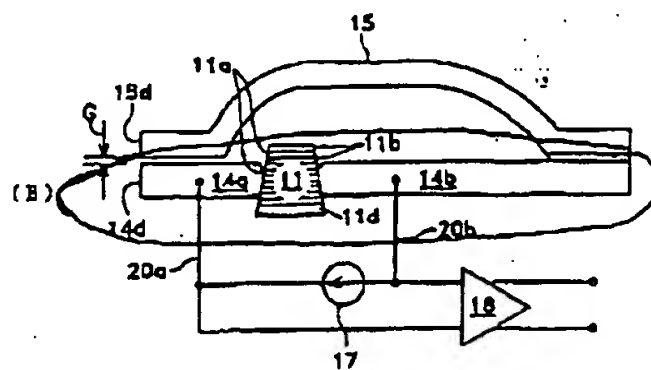
In contrast, the magnetic head of the present invention is configured as shown in the following figure, in which the claimed flux guide and the claimed magnetoresistance film have a signal magnetic field in the same general direction.



Thus, Lederman does not disclose or suggest a magnetic head having an MR film and a flux guide wherein the signal magnetic field in the flux guide is in the same general direction as the signal magnetic field of the magnetoresistance film, which further has the claimed overlapping structure between the magnetoresistance film and the flux guide.

Further, the analogous structure to the claimed features of the present invention is the following circled part of the head of Lederman. In the circled portion of Lederman, the magnetic field is routed in the same direction as between the flux guide 14a,b and the

magnetoresistance film 11. However, the flux guide 14a,b and the magnetoresistance film 11 of Lederman do not have the claimed overlapping structure of the present invention. Specifically, a part of a surface of the magnetoresistance film 11 does not overlap a part of a surface of the flux guide 14a,b wherein the surface of the magnetoresistive film is not an edge of the magnetoresistance film and the surface of the flux guide is not an edge of the flux guide.

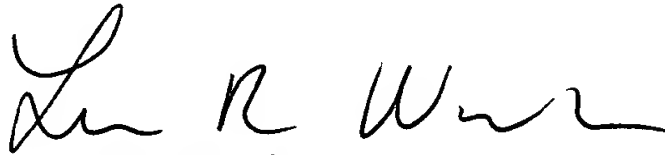


Lee et al. does not remedy the deficiencies of Lederman. Lee et al. is merely cited for disclosing a flux-guide regulating film aligning magnetic domains of the flux guide into a single magnetic domain. Lee et al. do not disclose or suggest a magnetic head having an MR film and a flux guide, wherein a part of a surface of the MR film overlaps a part of a surface of the flux guide, and wherein the surfaces of the MR film and the flux guide are not at an edge of the MR film and the flux guide. For this reason, Applicants submit that claims 1, 2 and 4-8 are allowable.

For the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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